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DOES IT WORK?

Evaluation Guidelines for Development Education Teachers

by

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SYNOPSIS

These evaluation techniques may be used effectively for both summative (long-range) and formative (short-range) evaluation. The use made of them will depend on the teacher and on his/her individual evaluation case. Whatever framework or methods chosen, teachers should always remember that the co-operation of their students will be the most valuable tool they have. This requires that the students are convinced that it is the *course and not they* that are being critically judged.

Testing and other evaluation techniques are essential tools for the teacher to use in compiling information to improve instructional technique. But this information cannot stand by itself. As such, it can only identify trends and assumptions. It must be combined with what the teacher knows to be the special characteristics of his/her students. Once these have been weighed, the teacher is then in the position to interpret the evaluation results in the context of his/her particular class and course objectives. These statements are backed up by individual cases of evidence that the teacher has compiled during the evaluation. The strength of his/her results cannot rest on numbers, but on case in point. This he/she presents in the form of an analytical summary of what he/she has learned with accompanying proposals for applying this knowledge to future plans.

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DOES IT WORK?

EVALUATION GUIDELINES for DEVELOPMENT EDUCATION TEACHERS

INTRODUCTION

After explaining the why and how of development studies, the most natural question is: "Does it work?". Are perspectives being broadened; do students know basic information about the world; do they see themselves as part of that world? If not, why not? Should the teacher be doing more of the same, change, quite trying altogether? Do the course goals make sense at all? Confronting these types of questions means undertaking the process of evaluation. In most cases, evaluation of development education is left to the individual teacher or program director to measure his or her own course. At the same time, however, program evaluation is often the haziest of teaching techniques within the instructor's professional realm. This paper has been prepared to help the individual teacher at the secondary and university levels deal with the "what is" and "how to" problems of course evaluation. It examines basic approaches and techniques for adapting to fit particular class situations. Set up to investigate the purpose and process of evaluation, the paper also includes an appendix of specific examples of "how to."

This paper is not intended to be *the* definitive study on evaluation theory and technique. Rather, it is intended to set up basic guidelines and models for teachers struggling with an area of education that demands innovation and individual approaches.

EVALUATION: THE PURPOSE

The broad purpose of the evaluation process within education is to see if the educational process can be and has been successful. In doing so, it includes testing the course's effect on students and the effectiveness of the program, the curriculum, the materials, and the teacher in meeting the stated objectives of the course. Often this process leads to the reformulation of goals and objectives, thereby improving the whole program.

The *goal of development education* is to give students the ability to live and work effectively in an increasingly global and interdependent society. Development education comes in many forms, under many names: global studies, world order studies, international education, issue units within traditional courses, to name only a few. A few objectives, however, are generally universal to all:

** to break down the ethnocentric 'we/they' dichotomy of viewing the world
** to discover that 'yes/no', 'right/wrong' answers have little, if any, connection with 'real' world problems and issues
** to develop a global perspective, recognizing that the individual, his family, town, country are integral factors in worldwide situations (e.g., world food supply)
** to develop knowledge and understanding of universal factors affecting the global society: economics, population growth, geography, etc.

These objectives require delving into both the cognitive and affective domains. The course's *cognitive domain* entails specific knowledge which can be tested for: facts,

figures, names, dates, places, concepts, etc. The course's *affective domain* refers to the translation of such data into personal interpretation. The cognitive approach provides the knowledge of how plants grow and provide nutrition, and that approximately 500-700 million people in the world are under- or malnourished. The affective approach provides the insight that the individual is part of an interdependent world and that, therefore, a world problem is his/her problem. Together, these two learning aspects join to give the student the ability to adequately form and confront opinion and action by encouraging him/her to use knowledge and reasoning to form individual opinions.

When the teacher undertakes *course evaluation*, grades have no place and should be ignored. The purpose is to gather information to weigh the worth of the course design, materials and methods, and its teaching in reference to the course goal. Though the *type* of testing may be similar, it is separate from comparing student achievement with a preset standard or with that of other students. There is never a question of "grading values".

Just as there are two types of domains for testing (cognitive and affective), there are also two approaches: formative and summative. The two differ in purpose, time factor, and level of generalization. *Summative testing* is designed to observe overall results of an entire course or substantial parts of it. Such evaluative techniques are used to test teacher effectiveness, to ascertain if students can and have grasped the overall subject, and to compare curricula effectiveness. *Formative evaluation* is used during the teaching process rather than at the end. Its purpose is to look at curriculum construction and adaptation, teaching, or learning, in order to improve any one or all of them. This aspect of testing involves independent units of a course, rather than overall results of a program. Both summative and formative testing are important to the teacher's evaluation process: to see if a course 'works' and why.

EVALUATION: THE PROCESS

The best aid teachers can have in undertaking evaluation of their development studies course is the cooperation of their classes. It must be clear to students that it is not the success or quality of *their performance* that is being judged, but that of the curriculum, teaching methods, and materials. It is necessary to emphasize the importance of making the students feel *a part of the testing process*, convinced that they are not being critically judged and may, therefore, be candid in their thoughts and expressions. One way to achieve this is by insuring their anonymity at times. A A number or letter code may be set up where the teacher does not necessarily identify the student with his answers.

The first step in the evaluation process is to set up a framework. Without tight conceptual control over the complex variety of events involved in this type of task, the teacher will be swamped by a bewildering mass of information. A succinct design for the project will serve to plant the teacher's work firmly in reality and to provide a practical system for 'reading' the results, making the study a useful, rather than merely an academic, procedure. The framework is not an evaluation technique itself; rather, its job is to set the stage for the evaluation process. As such, it calls on the evaluator/teacher to:

** define the course's goals
** outline the evaluation procedure and the purpose of each project within that procedure.

** plan which methods and materials to use (input) and what is expected to be learned and understood as a result (output)
** specify the evidence to be used to verify output (indicators)
** state all assumptions about students, methods, materials, the teacher, that have been made in choosing the indicators and in planning for expectations of output.

The grid on page 9 shows an example of how to set up a framework. Chart I (page 10) shows the use of such a grid in a hypothetical situation. In using a framework, several criteria are necessary for best results. The tester should be as objective as possible. Goals, assumptions, and conclusions must be useful in the actual operation of the process as well as in theory. Reporting must be done in a form readily understandable to those using the results. The tester should not just be measuring progress, but also *questioning the premise* on which the curriculum is based. This may seem a tiresome and overly complex chore, but it is a necessary one. It has the value of enabling the evaluator to recognize his own assumptions and weigh them against what he feels are basic standards for an effective course. It also allows those who are interested in his results to understand the process and reasoning behind them. Finally, it sets up a schedule and work-plan to simplify the task facing the evaluator.

Within this framework, basic questions need to be answered:

** WHY were specific course objectives chosen?
** WHAT is to be learned?
** WHO is involved in the procedure?
** HOW is the study being done?

The answers to these questions are critical for the teacher in understanding his/her evaluation as well as for outsiders who will try to make use of it. The questions are often interrelated and the answers will depend on the individual circumstances of each situation.

Question 1: WHY?

This question requires the evaluator to define in concrete terms the purpose of the course, such as:

** to understand the continuing interrelationship of major global issues
** to include historical, political, social, cultural and economic factors and their interactions when considering global issues
** to defer from assigning 'right/wrong' labels when discussing global issues. Instead, the emphasis should be on the fluctuating factors involved and the varying cultural viewpoints towards them.

Course design and evaluation are integral. Therefore, at the same time that the evaluator is outlining his course goal, he will also want to underline the purpose of his evaluation process. Evaluation goals might be:

** to determine the extent to which course goals are being met
** to determine the extent to which materials used help achieve course goals
** to determine areas of needed improvement.

Question 2: WHAT?

Having defined the goals, the next step is to identify the various objectives that

will lead to achieving them. In other words: WHAT is to be learned -- by the teacher as well as by the students? This question involves citing and describing the various objectives that make up the overall course goal and their levels of priority. These will depend on the educational philosophy of both the school and the teacher. This question involves the skills and information necessary for reaching the stated goal, and the indicators of that objective's achievement.

The teacher must question whether the objectives set up are both possible to achieve and desirable to the goal. As with goal statements, objectives must be described in operative terms that can be easily understood by 'outsiders'. The information from this question should also produce an outline of the course and a description of the materials and methods to be used (inputs), evidence used to verify assumed results (indicators of outputs), assumptions upon which the validity of these indicators are based, and hypotheses drawn as to the links between inputs, outputs, objectives and goals (see Chart I, page 10).

Having drawn together this information, the evaluator will be able to see if, indeed, his inputs help produce the desired output, leading to achievement of the stated objectives on the path to reaching the course goal.

Question 3: WHO?

The question 'who' includes "who is the test group," "who wants to know," and "who is the teacher." The first 'who' calls for a close look at the class, including:

** the group's 'starting point' for the course
** their attitudes toward certain global issues
** their orientation, both in and out of school, for the course
** the skills they bring to the course
** their reasons for taking the course
** their number, age, etc.

The teacher, wishing to answer 'who' as far as his class is involved, will doubtless wish to pre-test the students to get a better indication of where they are as far as his course is concerned. This form of testing, as well as other evaluation techniques, are discussed in the final 'HOW' question section (see pages 4-7).

Answering the question "who wants to know" will help teachers focus their evaluation goals and course objectives, as well as the language of the final report of results. Is the testing done for the teacher's own benefit so that the course can be improved? Is it done to convince the powers that be that the course should be taught again? Is it done for department heads to convince them that the orientation of other courses should contain knowledge and skills that will prepare students for the development studies course?

Finally, the question "who is the teacher" must be answered. Has he/she had prior experience with the course? What training has he/she had? In what discipline of the course is he/she the weakest? What impact does this weakness have on the course? What has the impact of the course been on his/her own thinking about the subject and how it should be taught?

Question 4: HOW?

The question of "how to" is, of course, of greatest concern to the teacher. This is especially true for the generally unfamiliar area of affective testing. Following

are descriptions and explanations of various evaluative techniques that have been found useful by teachers struggling with similar evaluation problems. Examples of many of these testing techniques may be found in the Appendix. Teachers will want to use these general discussions and specific examples as guidelines and models to be used in the manner best suited to individual and specific situation.

The evaluator of a development studies course is looking for evidence of the development of four types of knowledge: concrete facts, knowledge comprehension (interpreting facts), an increased global perspective for understanding issues, and an understanding that education is not only memorization of facts, but a recognition of relationships and a questioning of concepts.

Evaluation techniques come in myriad 'packages' in structured or unstructured settings, among them: observation and testing; individual or group contact; written or oral; question/answer or discussion. The reader will note that many of the following techniques are familiar to teachers as traditional tests for grading purposes. Always remember, however, that the objectives behind the evaluation procedure and those for testing achievement are quite different.

Interviews

A particularly effective method for the teacher undertaking evaluation of a single class or small group is the interview, either structured or unstructured. In the *structured* setting, the interviewer prepares a sequence of specific questions with fixed wording. His role is directive: to present the question and record the student's answer. The only deviations allowed are to clarify any misunderstandings related to the questions.

The teacher's role in the *unstructured* interview is non-directive. He has a limited number of key questions about pertinent topics. From them, he wants to obtain the greatest possible amount of analytic information from the conversation. The interviewer's role is to listen, rather than to lead the conversation, and to probe for ideas not immediately attributable to the key question. The unstructured setting has several advantages over the structured: it affords broader and deeper information through personal expressions; it can suggest ideas for teaching and writing; it can test the validity of structured testing information. In short, it can put meat on the skeletal structured approach. The major disadvantge of the unstructured approach is that it is quite time-consuming. Further, while the atmosphere of the unstructured interview is much more relaxed, the interviewer must be careful not to lead or otherwise influence the respondent's answers.

Research

Research projects can provide information about the student's ability to create, interpret, and apply knowledge. Because of the time factor involved in an entire research project, however, this process might be limited for interpreting change in skills that has occured during the course. Asking the student to describe how he would go about planning and researching a particular topic or project can provide similar insights with a time advantage. This is particularly true if the problem presented to the student requires the use of previously learned material in a never-before experienced capacity. For example: the student, having studied the factors involved in the increase in the price of oil worldwide, may be asked how he/she would investigate the increase in the price of coffee. Although he/she has not studied Brazilian development, there are comparable relationships upon which he may draw, thereby demonstrating his/her grasp of certain concepts of development, *in general*, such

as effects of tariffs and supply/demand relationships. Such projects can also give the teacher an indication of the student's awareness of the necessity to know the background, purpose, and slant of input material.

Written Tests

Four types of written testing are very useful for evaluating global studies courses:

** *objective and essay questions* measuring knowledge and its application
** *Interest Scales* measuring degrees of student interest in the various course areas
** *Semantic Differential Scales* measuring student attitudes
** *Likert Scales* measuring student attitudes

OBJECTIVE AND ESSAY QUESTIONS: The familiar objective and essay questions are those best suited for testing cognitive knowledge and the student's ability to apply this knowledge to problems with which he is not familiar. Objective questions need not simply be 'recall' tests. Questions in reference to described problems, graphs, or pictures will elicit information about application skills, as well. Care should be taken in presenting essay questions to insure obtaining the type of analytical information that the teacher desires. It is better, for example, to ask the student to "compare and contrast" rather than simply to "discuss" or "write about" a topic. Caution also should be taken to insure that the evaluator does not mistake a student's ability (or lack of ability) to express himself well with his knowledge and ability to apply information.

INTEREST SCALES: This technique is designed to measure student interest in the subjects of the course. Simple in construction, an Interest Scale is made up of four options which represent varying degrees of interest:

A. Dull
B. Generally uninteresting
C. Generally interesting
D. Very interesting

These are to be used by students to rate certain topics within the course. For example: the class is asked to rate the following as to how interesting they find them:

1. World Food Supply and Hunger
2. Brazilian Development
3. Study of Comparative Economies

Points of comparison can be assessed by including topics (such as sports) other than the type included in the course material.

To 'read' the results of an Interest Scale, give a weighted value to each of the four options offered: for example, starting with four points for 'very interesting', ranging down to one point for 'dull'. In this way, a class mean can be established. This information can be useful when compared with successive Interest Scale results given during the teaching of the course. The teacher can follow the effect of the course and note where extra emphasis or change in approach is desired.

SEMANTIC DIFFERENTIAL: This technique, another designed to measure student attitudes, focuses on the images and meanings that students ascribe to certain ideas or objects. The evaluator sets up a series of descriptive bipolar adjectives or adjective phrases, making sure that the extremes lie along the same continuum: "stupid/

smart," "important/trivial," "energetic/lazy." Students are asked to choose one of seven points between these two adjectives -- the first point lying at one extreme, the last at the other extreme, and the other five representing gradations between the two. For example: the teacher asks the students:

YOUR VIEWS OF DEVELOPMENT EDUCATION

1.	easy	___	___	___	___	___	___	___ difficult
2.	interesting	___	___	___	___	___	___	___ dull
3.	important	___	___	___	___	___	___	___ trivial
4.	complex	___	___	___	___	___	___	___ simplistic
5.	fun	___	___	___	___	___	___	___ drudgery
6.	challenging	___	___	___	___	___	___	___ boring

The teacher then assigns a value from one to seven for each point between the extremes. Averaging the scores for each pair of adjectives, he/she can find a mean for each set. These can be compared with results for other views on other questions, and with results for the same question at different times.

LIKERT SCALE: The Likert Scale, too, is used to measure attitudes. The evaluator draws up a series of statements that will indicate attitudes relevant to development education:

** People are poor because they are lazy.
** Indians should have fewer babies
** Western countries that formerly held colonies are to blame for all the difficulties of the developing nations.

The students respond to these statements on a five point continuum: strongly agree, agree, uncertain, disagree, strongly disagree. The statements should be meaningful, interesting, and as clear as possible to the students. Unsuccessful use of the Likert Scale technique is usually due to the statements' failure to arouse the students' interest or to students skipping statements because they don't know what they mean.

Using the students' responses, a class mean can again be established for each statement, using the same methods as in the last two examples. These means can be useful in demonstrating changes during the course.

Student Participation

Involving the student directly in the evaluation process can be useful both to the teacher and to the student. The teacher will be able to "see" the course from the "receivers" side. The student will gain insight into the learning *process* and into his own attitudes, knowledge and growth. Don't make this type of participation seem like a test. Give it a "let's discover together" spirit. The results will give an added dimension to the evaluation results and usefulness.

Each student might make an inclass evaluation folder for his or her work. The folder would include both his/her graded work and that pertaining to the evaluation. As such, it will provide a record of both cognitive and affective aspects of the stu-

dents' learning. It will also provide discussion material for interviews.

Ask the students to keep daily or weekly diaries of the course and their reactions both to what is taught and the teaching process itself. At the middle and end of the term, ask students to write essays on their diary entires: how the course has affected them, any change they see in their attitudes or actions, where they see their attitudes coming from, how they think they will use their new knowledge, if they will continue to study issues and areas, suggestions for changes or additions for the course or the evaluation.

At the beginning of the course, ask students to do a one or two page "profile" of themselves: basic history, structure of and attitude toward family and community, outside activities and interests, attitudes toward to course and school in general. Repeat the exercise at the end of the course. Have changes occured? What changes are students themselves aware of? Have student attitudes toward their outside activities and community changed in outlook and/or action? An extension of this exercise would be to ask students to project five years ahead: do they think they will continue to change (and how)?

DOES IT WORK?

Evaluation Guidelines For Development Studies Teachers

APPENDIX

GRID FOR EVALUATION FRAMEWORK

NARRATIVE SUMMARY	INDICATORS	EVIDENCE	ASSUMPTIONS
Course Goal: [what is the general purpose of the course?]	[what are the measures for goal achievement?]	[what are the means for verifying the indicators of achieving the course goal?]	[what assumptions were made in determining what evidence would validate the indicators of goal achievement?]
Goal Objectives: [what combination of basic understanding will result in meeting course goals?]	[what conditions will indicate achievement of goal objectives?]	[what are the means for verifying the indicators of achieving the goal objectives?]	[what assumptions were made in determining what evidence would validate the indicators of achieving the goal objectives?]
Course Output: [what achieved learning is expected?]	[what learning is deemed necessary for achievement of goal objective?]	[what are the means for verifying the indicators of achieving the desired course output?]	[what assumptions were made in determining what evidence would validate achievement of course output?]
Course Input: [what methods and materials are being used?]	[what type and quantity of information is made available by these methods and materials to achieve the desired output?]	[what are the means for verifying the indicators of the worth of the methods and materials cited?]	[what assumptions were made in determining what evidence would validace the worth of course input?]

CHART I: USING THE EVALUATION FRAMEWORK
(An example only, not representative of an actual course)

NARRATIVE SUMMARY	INDICATORS	EVIDENCE	ASSUMPTIONS
Course Goal: - to broaden the student's perspectives to a more global outlook to prepare him for the interdependent world he will meet, live, and work in as an adult.	- when discussing global issues, the student ties each with other issues in a continuum - the student avoids 'we/they' analyses - the student avoids 'right/wrong' analyses	Interviews Student evaluations of course Objective testing Research projects	- the student is relaxed enough to make candid observations - the teacher is candid in his analysis of the evidence collected
Goal Objectives: - to recognize factors of development - to recognize the interrelatedness of these factors	- when discussing global issues, the student includes economic, social, historic, cultural factors - when discussing one of the above factors, he does so in the context of the others	Research projects Debates Objective testing Essay questions In-class discussion	The student has access to the library The student is used to expressing himself verbally The student is used to expressing himself in writing
Course Output: - a basic understanding of Economics - a basic grasp of research techniques - a basic grasp of statistics - a basic understanding of Geography	Understanding principles of supply and demand Understanding tariffs and price supports Ability to read charts and graphs Geographic knowledge of continents, climate, resources, topography	Objective testing Plans for research Group reports In-class discussion	The student has access to the library The student has access to the course inputs The student can express himself verbally The student is provided in-class and out-of-class time to meet and work in groups
Course Input: [List] Texts, other materials Films Maps Community speakers with development experience Teacher: experience and academic background	- basic information on development concepts - basic geographic information - basic economic information - an understanding that 'global'= 'real world' - prepare student to support and trade ideas	Films and materials suggested by an organization specializing in global development education Group Reports: all members responsible for various parts, then made in to a whole presentation Objective testing	- the student has a Math background adequate for discerning economic relationships - the advising organization has successful experience in its work - the teacher knows his students well enough to make up workable groups